

Work Order ID 70578

Monday, June 13, 2011 10:25:34 AM



Page 1

Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/22/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 11-06-13

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 100 | DOCUMENT CONTROL | 0.00 | | | | | | | |
| DSI D9419 | Revision Nbr Rev A | | | | | | | | |
| DC | Memo | 0.00 | | | | | | | |
| Document Control | Photocopy bluefile and create labels per PPP D350-689-023 CHG002 | | | | | | | | |
| | | | | | | | | | |
| 110 | Pick Kit | 0.00 | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | | | | | | | | | |
| 120 | QC4- 100% Inspect kits for completeness | 0.00 | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

update paperwork

3 per CN-11-633

8/10/12

11/8/12

11/8/12

8/10/12

(R)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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NOTE: Date & initial all entries

Work Order ID 70578

Monday, June 13, 2011 10:25:34 AM



Page 2

Item ID: D350-689-023

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Setup Start



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Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011 Start Qty: 2.00



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Required Date: 6/22/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 | Packaging | 0.00 | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPP D350-689-023 Location: <u>10</u> PPP Rev: <u>B</u> | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

Rec'd 6/10/12 (20)

n/10/13

ME
11-10-12

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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| | | | | | | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Monday, June 13, 2011 10:25:41 AM

Page 1

Work Order ID: 70578

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011



Required Date: 6/22/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-23 new issue DD verified by:EC
route seq DD 10.02.12 verified by:JLM

IPP Rev:B revise

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| AN960JD10  | NAS1149D0363J | Purchased | No | | | 110 | Each | 0.0000 | 9 | 18 | | | |
| Washer D3025-1  | | Manufactured | No | | | 110 | Each | 3.0000 | 1 | 2 | | | |
| Beam | | | | | | | | | | | | | |

Remove per ECN 11-633

M117505

B70999

B70999

Location

Loc Qty

Loc Code

ST177

3

69612

3

D3026-1

Manufactured

No

110

Each

10.0000

1

2

Channel

Location

Loc Qty

Loc Code

ST177

10

70399

10

D3027-1

Manufactured

No

110

Each

17.0000

1

2

Clip

remove per ECN 11-633

per ECN 11-633

Location

Loc Qty

Loc Code

ST031

17

22566

17

D3027-3

Manufactured

No

110

Each

9.0000

1

2

Clip

remove per ECN 11-633

Location

Loc Qty

Loc Code

ST031

9

22566

9

11/5/9

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, June 13, 2011 10:25:41 AM

Page 2

Work Order ID: 70578

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011

Required Date: 6/22/2011

Start Qty: 2.00

Required Qty: 2.00

D3027-5  Manufactured No
Clip

110 Each 13.0000 1

Location

Loc Qty

Loc Code

ST031

13

22566

13

D3027-7  Manufactured No
Clip

110 Each 20.0000 4

Location

Loc Qty


Loc Code

ST031

20

70497

20

D3234-1  Manufactured No
Doubler

110 Each 0.0000 1

D3234-3  Manufactured No
Doubler

110 Each 1.0000 1

Location

Loc Qty

Loc Code

ST233

1

44166

1

D3811-041  Manufactured No
Seat Track Assembly

110 Each 0.0000 1

Monday, June 13, 2011 10:25:42 AM

Shop Packet Print

Page 2

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, June 13, 2011 10:25:42 AM

Page 3

Work Order ID: 70578

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011

Required Date: 6/22/2011

Start Qty: 2.00

Required Qty: 2.00

MS20426AD4-5



Rivet

remove per ECN 11-633

Purchased No

110 Each 5,621.000 14



28

Location

Loc Qty

Loc Code

MEZZ

332

6733

332

28

ST317

5289

6874

5289

110 Each 894.0000 34



68

MS20470AD4-5



Rivet, Universal Head

remove per ECN 11-633

Purchased No

Location

Loc Qty

Loc Code

ST319

894

116893

894

68

110 Each 3,609.000 18



36

MS20470AD4-6



Rivet, Universal Head

Remove per ECN 11-633

Purchased No

Location

Loc Qty

Loc Code

ST319

3609

117395

2094

117887

1515

36

110 Each 1,372.000 32



64

MS20470AD5-6



Rivet

remove per ECN 11-633

Purchased No

Location

Loc Qty

Loc Code

ST320

1372

105433

1372

64

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Shop Packet Print

Page 3

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, June 13, 2011 10:25:42 AM

Page 4

Work Order ID: 70578

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 6/10/2011

Required Date: 6/22/2011

Start Qty: 2.00

Required Qty: 2.00

MS21042L3

Purchased

No

110

Each

2,290.000

9

18



Nut

Location

Loc Qty

Loc Code

ST300

2290

116391

9

116549

581

117441

800

117601

400

117885

500

MS24694-S50

Purchased

No

110

Each

92.0000

9

18



Screw

Location

Loc Qty

Loc Code

ST289

50

117739

50

ST298

42

116900

42

Monday, June 13, 2011 10:25:43 AM

Shop Packet Print

Page 4

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

ENGINEERING CHANGE NOTICE **DART AEROSPACE LTD**

| | | | | |
|-----------------------------------|------------------|--------------------------------|--------------------------------------|---------------|
| Date: 11.09.08 | Job No.: ENG2106 | ADR Yes/No: Y | ADR Date: 11.09.08 | ECN #: 11-633 |
| Product No.: D350-689 | | Created By: DC | Approved By: <i>[Signature]</i> | |
| Product Name: Dual High Back Seat | | Checked By: <i>[Signature]</i> | General Manager Approval: <i>N/A</i> | |

| Distribution | Reqd | Resp | Initial / Date |
|-------------------------------|------|-------|--------------------|
| Production Manager / Coord. | Y | LL | <i>MF 11-09-28</i> |
| Purchasing Coord. | N | | |
| Production Engineering Coord. | Y | DD/EC | |
| | | | |

| Distribution | Reqd | Resp | Initial / Date |
|----------------------------|------|------|----------------|
| DQA / QA Coord. | N | | |
| QC Coordinator | N | | |
| Customer Technical Support | Y | MB | |
| Marketing | Y | SW | |
| Customer Order Processing | N | | |

Reason for Change:

TO ADDRESS FIT ISSUE WHEN INSTALLED ON AS350 B3, INCORPORATE DSIs

Documents Affected:

RELEASE IIN-D350-689 REV. B, ICA-D350-689 REV. 1, FMS-D350-689 REV. B, MDL-D350-689 REV. A

PARTS MUST COMPLY



PREVIOUS PARTS SATISFACTORY



| # | Quality Assurance Actions | Reqd | Resp | Notes | Complete |
|---|---------------------------|------|------|-------|----------|
| 1 | Notify Previous Customers | N | | | |
| 2 | Notify Eurocopter France | N | | | |
| 3 | | | | | |

| # | Engineering Actions | Reqd | Resp | Notes | Complete |
|---|--|------|------|---------------------|--------------------|
| 4 | Required Documents/Drawings Under Review | N | | | |
| 5 | Update Master Document List (MDL) | Y | DC | MDL-D350-689 REV. A | <i>DC 11.09.28</i> |
| 6 | Update Product Compatibility Matrix | N | | | |
| 7 | Create Eurocopter Form (FEE) | N | | | |
| 8 | Notify TC / FAA of Change | N | | | |
| 9 | | | | | |

| # | Document Control Actions | Reqd | Resp | Notes | Complete |
|----|---|------|------|--------------------|-----------------|
| 10 | Move Electronic Files/Design Journal | Y | KJ | | <i>11.09.27</i> |
| 11 | Update Product Specification Files | Y | KJ | | <i>11.09.28</i> |
| 12 | Update Approved/Preliminary Dwg PDF Files | N | | | |
| 13 | Update Document Record (DR) | N | | | |
| 14 | Update Product Development Summary | N | | | |
| 15 | Update QSI 021 and/or STC Approval List | N | | | |
| 16 | Update Parts / STC Database | N | | | |
| 17 | Update / Verify ARC Database | N | | | |
| 18 | Create / Update Change Record Form / Item Card Database | Y | KJ | SEE BELOW | <i>11.09.28</i> |
| 19 | Create / Update PPP's | Y | KJ | UPDATE AS REQUIRED | <i>11.09.28</i> |
| 20 | Red Decals required? | Y | KJ | UPDATE AS REQUIRED | <i>11.09.28</i> |
| 21 | Update Document Control Database / Laminated Dwgs | N | | | |
| 22 | Update Grey Project / Electronic Binder PDF Files | Y | KJ | | <i>11.09.28</i> |
| 23 | Update D-Part/M-Drawing/DSI/DEO Master Binders | Y | KJ | MDL | <i>11.09.28</i> |
| 24 | | | | | |

Description / Action:

D350-689-021 NOW @ CHG 004

D350-689-023 NOW @ CHG 003

UPDATE BOM FOR D350-689-023 TO MATCH IIN-D350-689 REV. B

UPDATE PAPERWORK FOR ALL D350-689-XXX KITS IN STOCK

UPDATE D350-689-023 KITS IN STOCK TO MATCH IIN-D350-689 REV. B

SEND UPDATED PAPERWORK TO INDOCOPTERS (TALK TO MARC BELLAVANCE)

*— 70578 in production
MF updated
11/10/11*

REFERENCE ONLY

ECN Verified & Complete: _____

Date: _____

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

| Installation | Weight | LATERAL | | LONGITUDINAL | |
|--|--------------------|---------------------|---------------------------|-------------------|--------------------------|
| | | Arm | Moment | Arm | Moment |
| D350-689-011 Dual High Back Seat Installation, Fwd Position | 27.6 lb 12.5 kg | -18.2 in -0.46 m | -502 in-lb -5.8 m-kG | 60.7 in 1.54 m | 1675 in-lb 19.3 m-kG |
| D350-689-013 Floor Provisions Kit, Fwd Position | 2.0 lb 0.9 kg | -18.2 in -0.46 m | -36 in-lb -0.4 m-kG | 60.7 in 1.54 m | 121 in-lb 1.4 m-kG |
| D350-689-011 Dual High Back Seat Installation, Aft Position | 28.1 lb 12.7 kg | -18.2 in -0.46 m | -511 in-lb -5.8 m-kG | 63.7 in 1.62 m | 1790 in-lb 20.57 m-kG |
| D350-689-013 Floor Provisions Kit, Aft Position | 3.1 lb 1.4 kg | -18.2 in -0.46 m | -56 in-lb -0.6 m-kG | 62.2 in 1.58 m | 193 in-lb 2.2 m-kG |
| D350-689-015 Seat Modification Kit | 1.0 lb 0.5 kg | -17.2 in -0.44 m | -17 in-lb -0.22 m-kG | 60.7 in 1.54 m | 61 in-lb 0.77 m-kG |
| D350-689-017 Shoulder Harness, Fwd Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-kG | 60.7 in 1.54 m | 267 in-lb 3.08 m-kG |
| D350-689-017 Shoulder Harness, Aft Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-kG | 64.7 in 1.64 m | 285 in-lb 3.28 m-kG |
| D350-689-019 Control Guard, Fwd Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-kG | 60.7 in 1.54 m | 30 in-lb 0.35 m-kG |
| D350-689-019 Control Guard, Aft Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-kG | 64.7 in 1.64 m | 32 in-lb 0.38 m-kG |
| D350-689-021 Dual High Seat Back Installation, LH Fwd Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-kG | 60.7 in 1.54 m | 1772 in-lb 20.3 m-kG |
| D350-689-021 Dual High Seat Back Installation, LH Aft Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-kG | 64.7 in 1.64 m | 1889 in-lb 21.6 m-kG |
| D350-689-023 Energy Attenuating Floor Provisions Kit | 2.5 lb 1.1 kg | -18.2 in -0.46 m | -46 in-lb -0.5 m-kG | 62.2 in 1.58 m | 156 in-lb 1.7 m-kG |

5. PARTS LIST

| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|---|
| X | | | | | | | | | D350-689-011 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| 1 | X | | | | | | | | D350-689-013 | FLOOR PROVISIONS KIT |
| | | X | | | | | | | D350-689-015 | SEAT MODIFICATION KIT |
| | | | X | | | | | | D350-689-017 | SHOULDER HARNESS KIT |
| | | | | X | | | | | D350-689-019 | CONTROL GUARD KIT |
| | | | | | X | | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | | | | | 1 | X | | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| 1 | | | | | | | X | | D350-689-041 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | 1 | | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | | | 2 | 2 | D3016-041 | SEAT FRAME ASSEMBLY |
| | | | | | | | 1 | 1 | D3017-041 | BACK FRAME ASSEMBLY |
| 1 | | | | | 1 | | | | D3018-1 | SEAT CUSHION |
| 1 | | | | | 1 | | | | D3019-1 | BACK CUSHION |
| | | | | | | | 1 | 1 | D3021-041 | TUBE ASSEMBLY |
| | | | | | | | 1 | 1 | D3022-1 | SEAT PAN |
| | | | | | | | 1 | 1 | D3023-1 | BACK PANEL |
| | | | | | | | 3 | 3 | D3024-1 | SPACER |
| | 1 | | | | | | | | D3025-1 | BEAM |

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Revision: **B**

Date: 11.07.22

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 0
REF. CANADIAN STC: SH02-33
REF. FAA STC: SR01620NY

PURPOSE

The purpose of this DSI is to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisions Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

PART LIST

REFERENCE ONLY

| -011 | -021 | -023 | -043 | P/N | DESCRIPTION |
|------|------|--------------|------|--------------|---|
| X | | | | DSI 9419-011 | ENERGY ATTENUATING CONVERSION KIT |
| | X | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | 1 | X | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| | 1 | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | 2 | D3016-041 | SEAT FRAME ASSEMBLY |
| | | | 1 | D3017-041 | BACK FRAME ASSEMBLY |
| | 1 | | | D3018-1 | SEAT CUSHION |
| | 1 | | | D3019-1 | BACK CUSHION |
| | | | 1 | D3021-041 | TUBE ASSEMBLY |
| | | | 1 | D3022-1 | SEAT PAN |
| | | | 1 | D3023-1 | BACK PANEL |
| | | | 3 | D3024-1 | SPACER |
| | | 1 | | D3025-1 | BEAM |
| | | 1 | | D3026-1 | CHANNEL |
| | | 1 | | D3027-1 | CLIP |
| | | 1 | | D3027-3 | CLIP |
| | | 1 | | D3027-5 | CLIP |
| | | 4 | | D3027-7 | CLIP |
| | | | 2 | D3031-1 | LOOP |
| 1 | | 1 | | D3234-1 | DOUBLER |
| 1 | | 1 | | D3234-3 | DOUBLER |
| 2 | | | 2 | D3808-041 | SEAT RAIL ASSEMBLY |
| 4 | | | 4 | D3809-1 | SLIDING BLOCK |
| 1 | | 1 | | D3811-041 | SEAT TRACK ASSEMBLY |

~~1~~ = REMOVED

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:

D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008
CERT. NO.: SH02-33
ISSUE NO.: 1

| | | | |
|------------|--------------|--|--------------|
| A | NEW ISSUE | RF | 08.08.19 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | RF | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | 1 | DRAWING NO. | REV. A |
| MFG. APPR. | N/A | DSI 9419 | SHEET 1 OF 5 |
| APPROVED | 1 | TITLE | SCALE |
| DE APPR. | 1 | ENERGY ATTENUATING PROVISION KIT | NTS |
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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| -011 | -021 | -023 | -043 | P/N | DESCRIPTION |
|------|------|---------------|------|---------------|------------------------|
| | | | 3 | AN3-12A | BOLT |
| 14 | | 14 | | MS20426AD4-5 | RIVET |
| 34 | | 34 | | MS20470AD4-5 | RIVET |
| 18 | | 18 | | MS20470AD4-6 | RIVET |
| | | 32 | | MS20470AD5-6 | RIVET |
| | | | 40 | MS20600AD4W2 | RIVET |
| | | | 6 | MS20600AD4W3 | RIVET |
| 9 | | 9 | 23 | MS21042L3 | NUT (or MS21042-3) |
| | | | 4 | MS24693-S272 | SCREW |
| 8 | | | 8 | MS24694-S3 | SCREW |
| 9 | | 9 | | MS24694-S50 | SCREW |
| 4 | | | 4 | MS24694-S148 | SCREW |
| | | | 4 | MS27039-1-17 | SCREW |
| | | | 12 | MS27039-1-19 | SCREW |
| | | | 23 | NAS1149D0332J | WASHER (or AN960JD10L) |
| 9 | | 9 | | NAS1149D0363J | WASHER (or AN960JD10) |

PROCEDURE

1. Install the under floor structure as outlined in steps 1-18 of IIN-D350-689 Rev. A and DSI 9311 Rev. A as applicable, except do not install D3032-1 Spacers. Attach D3026-1 Channel to floor using (14) MS20426AD4 rivets. Ensure D3234-1/-3 Doublers are installed per DSI 9269 Rev. A.
2. Position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.
3. Transfer the attachment holes from D3811-041 Seat Track Assy to aircraft floor (9 pls) using a $\phi 0.201$ (#7 drill). Deburr holes. Install D3811-041 using (9) MS24694-S50 screws, (9) NAS1149D0363J washers, and (9) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).
4. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).
5. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008
CERT. NO.: SH02-33
ISSUE NO.: 1

| | | | |
|-------------------------|---------------|--|--------------|
| DESIGN | RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | RF | | |
| CHECKED | RF | DRAWING NO. | REV. A |
| MFG. APPR. | N/A | DSI 9419 | SHEET 2 OF 5 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | ENERGY ATTENUATING PROVISION KIT | NTS |
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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

| Installation | Weight | LATERAL | | LONGITUDINAL | |
|--|--------------------|---------------------|---------------------------|-------------------|--------------------------|
| | | Arm | Moment | Arm | Moment |
| D350-689-011 Dual High Back Seat Installation, Fwd Position | 27.6 lb 12.5 kg | -18.2 in -0.46 m | -502 in-lb -5.8 m-kg | 60.7 in 1.54 m | 1675 in-lb 19.3 m-kg |
| D350-689-013 Floor Provisions Kit, Fwd Position | 2.0 lb 0.9 kg | -18.2 in -0.46 m | -36 in-lb -0.4 m-kg | 60.7 in 1.54 m | 121 in-lb 1.4 m-kg |
| D350-689-011 Dual High Back Seat Installation, Aft Position | 28.1 lb 12.7 kg | -18.2 in -0.46 m | -511 in-lb -5.8 m-kg | 63.7 in 1.62 m | 1790 in-lb 20.57 m-kg |
| D350-689-013 Floor Provisions Kit, Aft Position | 3.1 lb 1.4 kg | -18.2 in -0.46 m | -56 in-lb -0.6 m-kg | 62.2 in 1.58 m | 193 in-lb 2.2 m-kg |
| D350-689-015 Seat Modification Kit | 1.0 lb 0.5 kg | -17.2 in -0.44 m | -17 in-lb -0.22 m-kg | 60.7 in 1.54 m | 61 in-lb 0.77 m-kg |
| D350-689-017 Shoulder Harness, Fwd Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-kg | 60.7 in 1.54 m | 267 in-lb 3.08 m-kg |
| D350-689-017 Shoulder Harness, Aft Position | 4.4 lb 2.00 kg | -18.2 in -0.46 m | -80.1 in-lb -0.92 m-kg | 64.7 in 1.64 m | 285 in-lb 3.28 m-kg |
| D350-689-019 Control Guard, Fwd Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-kg | 60.7 in 1.54 m | 30 in-lb 0.35 m-kg |
| D350-689-019 Control Guard, Aft Position | 0.5 lb 0.23 kg | -9.0 in -0.23 m | -4.5 in-lb -0.05 m-kg | 64.7 in 1.64 m | 32 in-lb 0.38 m-kg |
| D350-689-021 Dual High Seat Back Installation, LH Fwd Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-kg | 60.7 in 1.54 m | 1772 in-lb 20.3 m-kg |
| D350-689-021 Dual High Seat Back Installation, LH Aft Position | 29.2 lb 13.2 kg | -18.2 in -0.46 m | -531 in-lb -6.1 m-kg | 64.7 in 1.64 m | 1889 in-lb 21.6 m-kg |
| D350-689-023 Energy Attenuating Floor Provisions Kit | 2.5 lb 1.1 kg | -18.2 in -0.46 m | -46 in-lb -0.5 m-kg | 62.2 in 1.58 m | 156 in-lb 1.7 m-kg |

5. PARTS LIST

| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|---|
| X | | | | | | | | | D350-689-011 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| 1 | X | | | | | | | | D350-689-013 | FLOOR PROVISIONS KIT |
| | | X | | | | | | | D350-689-015 | SEAT MODIFICATION KIT |
| | | | X | | | | | | D350-689-017 | SHOULDER HARNESS KIT |
| | | | | X | | | | | D350-689-019 | CONTROL GUARD KIT |
| | | | | | X | | | | D350-689-021 | DUAL HIGH BACK SEAT INSTALLATION, LH |
| | | | | | 1 | X | | | D350-689-023 | ENERGY ATTENUATING FLOOR PROVISIONS KIT |
| 1 | | | | | | | X | | D350-689-041 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | 1 | | | X | D350-689-043 | DUAL HIGH BACK SEAT ASSEMBLY |
| | | | | | | | 2 | 2 | D3016-041 | SEAT FRAME ASSEMBLY |
| | | | | | | | 1 | 1 | D3017-041 | BACK FRAME ASSEMBLY |
| 1 | | | | | 1 | | | | D3018-1 | SEAT CUSHION |
| 1 | | | | | 1 | | | | D3019-1 | BACK CUSHION |
| | | | | | | | 1 | 1 | D3021-041 | TUBE ASSEMBLY |
| | | | | | | | 1 | 1 | D3022-1 | SEAT PAN |
| | | | | | | | 1 | 1 | D3023-1 | BACK PANEL |
| | | | | | | | 3 | 3 | D3024-1 | SPACER |
| | 1 | | | | | | | | D3025-1 | BEAM |

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IIN-D350-689

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| Qty -011 | Qty -013 | Qty -015 | Qty -017 | Qty -019 | Qty -021 | Qty -023 | Qty -041 | Qty -043 | Part Number | Description |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------------------|
| | 1 | | | | | 1 | | | D3026-1 | CHANNEL |
| | 1 | | | | | | | | D3027-1 | CLIP |
| | 1 | | | | | | | | D3027-3 | CLIP |
| | 1 | | | | | | | | D3027-5 | CLIP |
| | 4 | | | | | 4 | | | D3027-7 | CLIP |
| | | | | | | | 4 | | D3028-1 | STUD |
| | | 2 | | | | | 2 | | D3029-1 | SPRING |
| | | 2 | | | | | 2 | | D3030-1 | LOCK |
| | | | | | | | 2 | 2 | D3031-1 | LOOP |
| | 1 | | | | | | | | D3032-1 | SPACER |
| | 2 | 1 | | | | | | | D3033-1 | SEAT TRACK |
| | | 4 | | | | | | | D3059-1 | STUD |
| | | 4 | | | | | | | D3060-1 | BUSHING |
| | | 4 | | | | | | | D3061-1 | RADIUS BLOCK |
| | | | | 1 | | | | | D3084-3 | STRUT |
| | 1 | | | | | | | | D3234-1 | DOUBLER |
| | 1 | | | | | 1 | | | D3234-3 | DOUBLER |
| | 2 | | | | | | | | D3234-5 | SPACER |
| | | | | | | | | 2 | D3808-041 | SEAT RAIL ASSEMBLY |
| | | | | | | | | 4 | D3809-1 | SLIDING BLOCK |
| | | | | | | 1 | | | D3811-041 | SEAT TRACK ASSEMBLY |
| | | | 2 | | | | | | D4071-041 | SHOULDER HARDNESS ASSY |
| | | | | | | | 3 | 3 | AN3-12A | BOLT |
| | | | | 1 | | | | | AN4-12A | BOLT |
| | | | | 1 | | | | | AN4-20A | BOLT |
| | | 2 | | | | | | | AN5-4A | BOLT |
| | | | | | | | 40 | 40 | MS20600AD4W2 | RIVET |
| | | | | | | | 6 | 6 | MS20600AD4W3 | RIVET |
| | | | | | | 9 | 17 | 17 | MS21042L3 | NUT (OR MS21042-3) |
| | | 4 | 2 | 2 | | | 6 | 6 | MS21042L4 | NUT (OR MS21042-4) |
| | | | | | | | | | MS21042L5 | NUT (OR MS21042-5) |
| 12 | 4 | | | | | | | | MS21059L3 | NUTPLATE |
| | | | | | | | 4 | 4 | MS24693-S272 | SCREW |
| 2 | 1 | | | | | | | | MS24693-S273 | SCREW |
| | | | | | | | | 8 | MS24694-S3 | SCREW |
| | | | | | | 9 | | | MS24694-S50 | SCREW |
| | | | | | | | 4 | | MS24694-S148 | SCREW |
| 6 | 3 | | | | | | | | MS27039-1-10 | SCREW |
| | | | | | | | 4 | 4 | MS27039-1-17 | SCREW |
| | | | | | | | 6 | 6 | MS27039-1-19 | SCREW |
| | | | | | | | 6 | 6 | MS27039-4-21 | SCREW |
| 6 | 3 | | | | | | 17 | 17 | NAS1149D0332J | WASHER (OR AN960JD10L) |
| | | | | | | 9 | | | NAS1149D0363J | WASHER (OR AN960JD10) |
| | | | | 8 | | | | | NAS1149D0416J | WASHER (OR AN960JD416L) |
| | | | | | | | 6 | 6 | NAS1149D0432J | WASHER (OR AN960JD416) |
| | | 4 | | | | | | | NAS1149D0516J | WASHER (OR AN960JD516L) |
| | | 4 | | | | | | | NAS1149D0563J | WASHER (OR AN960JD516) |
| | | | | 2 | | | | | NAS43DD4-46N | SPACER |

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